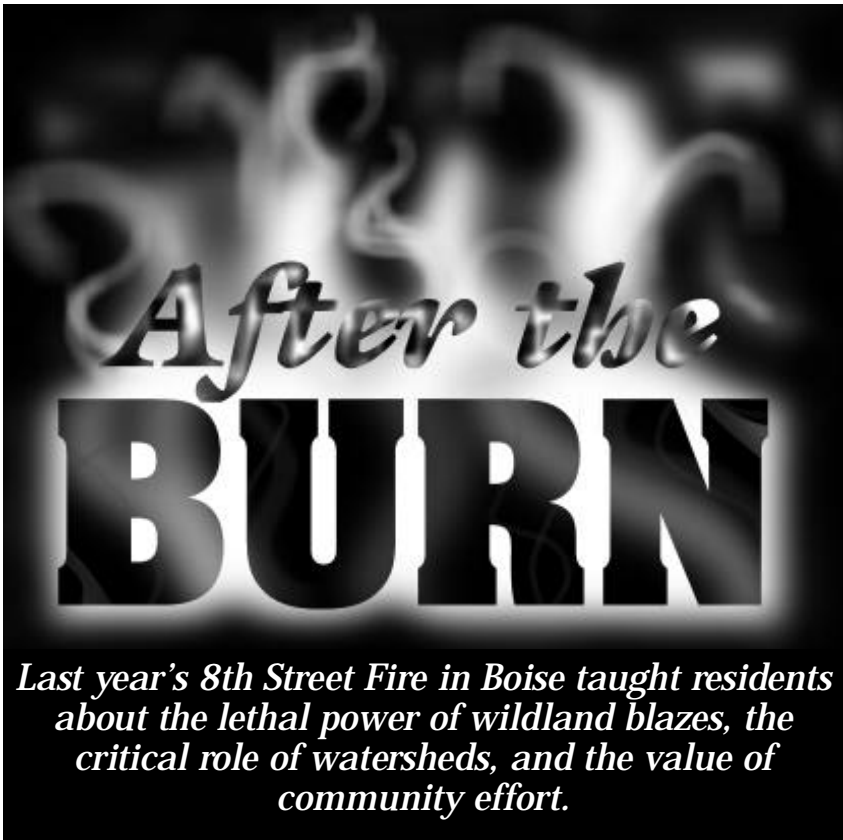


# Feature Story



*Last year’s 8th Street Fire in Boise taught residents about the lethal power of wildland blazes, the critical role of watersheds, and the value of community effort.*

Pat Entwistle

From his observation aircraft, **Randy Eardley** had a panoramic view of the inferno: “Flames threatened homes at every turn, people filled the roads, fire engines tried to maneuver from place to place, and the radio traffic in my headset was feverish all afternoon. As the fire crested a ridge off Hulls Gulch, I could feel the intense heat even inside the airplane, which instantly became an oven.”

“It was frustrating at times,” recalls Eardley, the air tactical supervisor at the Bureau of Land Management’s Lower Snake River District in Idaho. “We were battling extreme fire behavior, trying to protect homes in the interface, and dealing with thousands of casual observers clogging narrow roadways, which hampered firefighters’ ability to get around. We even had to call off some retardant drops because there were too many people on the hillside and in the way.”

Boise’s 8th Street fire began around 2:30 p.m. on August 26, allegedly started by a tracer bullet fired in the Boise Police Association Reserve Firing Range at the northeast edge of town. The wildland fire raged all day and late into the evening, ultimately burning 15,300 acres. The flames consumed most of four watersheds and the backyard playground of thousands of Boiseans. Dozens of homes were threatened; only one was partially burned. Local, state, and federal forces fought the fire at a cost of \$3.5 million.

“All of the conditions here were ripe for this type of fire,” says Eardley. “We had an excess of fuel, a hot and dry day (104 degree temperature), very strong winds, and narrow drainages. And it happened in an interface area (where urban development meets wildlands) with people and homes everywhere. Given all the subdivisions that were threatened, it’s remarkable that we didn’t have greater damage or serious injuries.”

BLM officials believe most Boise residents now have a better understanding of the powerful threat posed by wildland fire, but are concerned that many homeowners and potential homeowners in interface areas may become complacent because of the successful protection provided by local, state, and federal firefighting resources.

## Where Cities Meet Wildlands

The wildland-urban interface issues associated with this fire will be discussed for many years and can serve as an example in the review and implementation of national policies. The southern perimeter of the fire was lined with high-value homes, while the wildland area that burned is a valuable watershed containing crucial winter game range, rare and sensitive plants, and popular recreation trails, including a designated National Recreation Trail.



*Above, local firefighters from Boise and surrounding communities joined federal forces to keep the fire from crossing a major highway. At left, Homeowners watched anxiously into the night as flames threatened dozens of high-value residences. Many homes were literally surrounded by the fire.*

The fire was actually contained on September 2, although the majority of the damage was done the first afternoon and evening. On the second day of the fire, a 20-member rehabilitation team, representing 12 local, state, and federal agencies, began collecting data. By September 5, the first draft of the team’s report was completed, and rehabilitation efforts had begun by mid-September.

The fire burned 22 square miles of land situated above Boise. The Hulls Gulch and Crane Creek watersheds were destroyed from top to bottom, along with a huge chunk of Stewart Gulch to the west and Cottonwood Creek to the east. Recent soil surveys classify 90 percent of the foothills as highly erosive lake deposits and decomposed granite. Before the burn, scientists estimated about two tons of soil per acre eroded every year in the foothills; now those estimates have increased to thirteen tons per acre.

Today, an aerial view dramatically shows a huge black sandpile with dozens of drainages, large and small, funneling straight into the city. Long-time Boise residents recall all too clearly the 1959 floods and mud slides that inundated north-end neighborhoods. They were the result of a rainstorm that hit 17 days after a fire had burned most of the Cottonwood Creek drainage. Adjacent areas that had burned in 1957 and 1958 also contributed significantly to the flooding. But there wasn’t any flooding from adjacent watersheds that had not burned; if they actually received a similar amount of rainfall, they simply absorbed the moisture.



Martha Hahn, left BLM’s Idaho state director, and BLM investigator Keith Aller survey damaged areas.

The rehab team reviewed details of the 1959 event and other examples, including a 1995 debris torrent that moved the channel of the North Fork of the Boise River in the wake of a fire the year before.

The evidence was clear: even a year or two after a fire, a moderate rainstorm on a burned area can trigger a catastrophic event. It was also very clear that homes, schools, and hospitals would be damaged or destroyed if that were to occur now in Boise’s foothills. In addition to thousands of private residences, the at-risk area hosts three hospitals, 12 schools, 25 long-term care centers, 65 child-care facilities, and other public buildings.

The team concluded that a storm capable of causing substantial mud flows and flooding in the burned area wouldn’t have to be very large. The trigger could be a two-to-five-year rainstorm that dropped half an inch of rain in one hour on the damaged watersheds. This means that in any given year there is a 50-50 chance of such a storm.

The team also estimated that a 2-to 5-year storm could now create twice the runoff of a 500-year storm under pre-burn conditions. Though these are projections based on numerous estimates and variables, they represent the professional judgment of Idaho’s best resource scientists. This was obviously a situation that called for immediate, scientifically sound action.

## The Community Mobilizes

The team presented four proposals, including a no-action choice and alternatives for low, medium, and high levels of rehabilitation. Alternative 4, the highest level of rehabilitation, was selected because of the threat to the community. In the rehabilitation, as in the firefighting effort, the emphasis has been on the protection of life and property.

Flood-control and rehabilitation treatments that were included in the selected alternative and have now been completed include 1) contour felling of trees, hand and mechanical trenching, tilling, and the placement of straw wattles and straw-bale check dams to slow runoff and allow the ground to soak up rainfall; 2) seeding and replanting of grasses,